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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, MADELEINE ANH VINH

ART UNIT PAPER NUMBER

2626

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/538,483

Applicant(s)

IIDA, MASARU

Examiner

Madeleine AV Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is responsive to amendment filed on September 22, 2004.

Applicant amends the drawings, the specification, claims 1, 6, 8, 9, 16, 19, 20.

Response to Arguments

Applicant remarks that Shu does not at all address any smoothing technology for generating a multi-color image. The half-toning operation determines binary values (Cb, Mb, Yb) for different color components. This has nothing to do with any smoothing technique addressed in the present application.

Shu teaches that "As described in more detail in the commonly assigned co-pending U.S. patent application Ser. No. 08/679,644 of Shu et al. for "Error-Diffusion-Type Half-Toning Employing Adaptive Thresholding for Enhanced Smoothness," which was filed on Jul. 12, 1996, and is hereby incorporated by reference, this quantization-threshold variation results in greater smoothness than a fixed threshold affords." (col. 6, lines 4-11). Thus, the technique used in Shu is also a smoothing technology for generating a multi-color image. In addition, applicant argues limitations that are not in the claims. The specification is not the measure of the invention. Therefore, limitations contained therein can not be read into the claims for the purpose of avoiding the prior art. In re Sporck, 55 CCPA 743, 386 F.2d 924, 155 USPQ 687 (1968).

Applicant remarks that the claims were amended to clarify the exact nature of the different signals (amended signals) generated by the amendment unit of the present invention. It

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should be emphasized that each amended signal is determined based on information about the monochrome image for one color, in addition to information about the monochrome image of another color. The half-toning operation disclosures in the primary reference to Shu are not relevant to the present claimed features, as amended.

Shu teaches the exact nature of the different signals (amended signals such as Cb, Yb, Mb, Kb) generated by the amendment unit of the present invention. It should be emphasized that each amended signal is determined based on information about the monochrome image for one color (C, M, Y), in addition to information about the monochrome image of another color (K).

Therefore, applicant's arguments filed on September 22, 2004 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,2, 3, 8, 9, 10, 11, 12, 13, 18-20 are 2(e) as being anticipated by Shu (US Patent No. 5,838,885).

Concerning claims 1, 8, 9, 18, Shu discloses an apparatus generating a multicolor image indicated by image data by overlapping monochrome images of different colors according to the image data comprising an amendment unit (Figs.5-6) generating amended signals (Cb, Mb, Yb,

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Kb), one amended signal for each of the different colors, wherein each amended signal is amended based on information in the image data about the monochrome image for one of the different colors (C, M, Y) and information in the image data about the monochrome image of another of the different colors (K); and an image generating unit (26, Fig.4) generating the multicolor image by generating the monochrome images according to the amended signals and overlapping the monochrome images (Figs.3, 5-7; Abstract; col. 4, line 45 – col. 6, line 36).

Concerning claims 2, 3, 10, 12, Shu further teaches that the amendment unit amends the signals based on a correspondence in color and arrangement between pixels forming the multicolor image; the arrangement of pixels forming the monochrome image can be changed (due to the correction of the color values), (Abstract; col. 4, line 56 – col. 5, line 13; col. 7, lines 30-59).

Concerning claims 11, 13, Shu further teaches that the amendment unit is provided for each signal for generation of a monochrome image of a different color and each amendment unit amends the signal according to the same rule (Fig.6); the signal amended by the amendment unit are corrected back to an unamended signal (col. 5, line 1 – col. 6, line 36).

Claims 19-20 are method claims of apparatus claims 1, 8, 9, 18. Claims 19-20 are rejected for the same rationales set forth for claims 1, 8, 9, 18.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 5, 6, 7, 14, 15, 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shu as applied to claims 1, 9 above, and further in view of Ancin (US Patent No. 5,956,468).

Concerning claims 4, 14, Shu fails to teach an extraction unit for extracting partial image data indicating a part of an image indicated by the image data from the image data. Ancin discloses a document segmentation system and method wherein the image is extracted as a part of the image before being processed and corrected (Figs. 3, 4; Abstract; col. 9, lines 8-43; col. 9, lines 32-40). It would have been obvious to one skilled in the art at the time the invention was made to combine the above teaching of Ancin to the system in Shu since it was commonly known in the art that an image can be combined with different types of image such as color image, black and white image, text, ... wherein Shu is only for processing the color image or a part of the combined image.

Concerning claims 5, 6, 7, 15, 16, 17, Shu further teaches that the image data containing a pixel forming a monochrome image generated by an image generation unit and pixels around the pixel and selection unit for selecting a signal for use by the image generation unit in generating the monochrome image about each color from among the amended signals (col. 4, line 45 – col. 5, line 42); a monochrome image forming part of the multicolor image can be a black monochrome image and the apparatus further comprises a generation unit for generating a signal for generation of the black monochrome image from a signal for generation of a monochrome image of another color amended by the amendment unit (Fig.6; col. 6, line 16 – col. 7, line 24).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

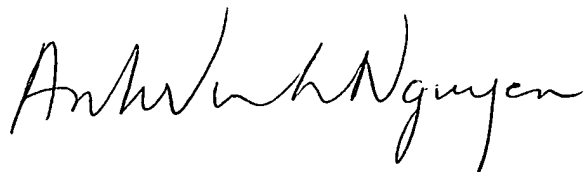
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 703 305-4860. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams can be reached on 703 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in cursive script, appearing to read "Madeleine AV Nguyen".

Madeleine AV Nguyen
Primary Examiner
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January 24, 2005